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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,129	11/24/2003	Steven Shepley	D-1182 R1	4671
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RALPH E. JOCKE walker & jocke LPA 231 SOUTH BROADWAY MEDINA, OH 44256				
EXAMINER				
HESS, DANIEL A				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/722,129

Applicant(s)

SHEPLEY ET AL.

Examiner

Daniel A. Hess

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☒ Claim(s) 27-34 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

This action is responsive to 11/24/2003 filing by the applicant.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 22 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In particular, the term “non-standard” is indefinite because the scope of what is standard can change over time.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-10, 12, 14-21, 23, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coutts (US 5,563,393) in view of Gill et al. (US 6,279,826).

Re claims 1 and 2:

See column 1, lines 35-60 of Coutts for an overview. See figure 1: an 'operator interface device' (hereinafter OID) 12 is shown, which an operator can use to interact with an ATM 10. Note that two embodiments are discussed (a) the ATM transmits its state to the OID unprompted, and (b) the ATM indicates its state in response to a query by the OID. For the sake of the instant claim, attention is drawn to (b), notably column 6, lines 15-28, wherein the handheld device requests diagnostic data. The conveyance of diagnostic data through a controller 45 to the diagnostic article / OID 12 is clearly shown in figure 2.

Lacking in Coutts is a teaching that the diagnostic article is "in supporting connection with the housing." Instead, the handheld diagnostic device in Coutts communicates by radio signal.

Gill et al. teaches that diagnostics for an ATM occurs by a wired physical connection.

In view of Gill's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to substitute a physical, wired connection for the wireless connection of Coutts in order to (a) reduce risk of radio communications being intercepted, (b) have a more

reliable wired as opposed to wireless connection and (c) avoid misdirected communications where there are multiple ATMs near each other. As for 'supporting connection' this is taught by such old and well-known technologies as USB memory sticks, and a motivation is so that a technician doesn't have to personally hold a diagnostic device for an extended period of time.

Re claim 3: Naturally the ATM of Coutts has a currency dispensing device and this is monitored; this is the most essential function of an ATM for most people.

Re claim 4: See column 6, lines 15-30: The operator uses the device to query the machine. This data is provided to the CPU of the ATM by various sensors, as can be seen in figure 2. By one definition, obtaining the data associated with a sensor is performing a test. The test can be a single step of reading the sensor output.

Re claim 5: Interface software of the interface device receives indicia (i.e. data) indicating the state of the banking machine and the interface devices process this to provide state information and repair instructions to service personnel.

Re claim 6: Column 5 (throughout) discusses how the handheld diagnostic devices provide instructions for remedial actions.

Re claim 7: See column 3: An interface indicative of the 'state of health' of the ATM is brought up in response to a signal from the ATM. The interface is broadly a browser because it is software that allows a user to browse through manual information one piece at a time.

Re claim 8: This is generally the case: the interface software of the interface device receives indicia (i.e. data) indicating the state of the banking machine and the interface devices process this to provide state information and repair instructions to service personnel.

Re claim 9, 12: Coutts recites (column 3, lines 30-40):

The various levels of instructions may be accessed by a **code number input into the device by the operator**, through the use of character recognition techniques as discussed above. Also an authorization card, which could be inserted into the device prior to operation, **or any other suitable security means**, may be utilised.

Secret codes have thus been explicitly recited by Coutts.

What is not explicitly recited is that the secret code of Coutts is date-dependent.

However, Coutts recites that "any other suitable security means" may be used and date-dependent password (i.e. security codes) have long been employed in computer security, as this examiner, who majored in computer science and worked in the field, can attest.

In view of Coutts' teaching and in view of a well-known security technique, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the old and well-known date-based security code because this makes compromising the code much more difficult.

Re claim 10:

This follows from claim 9, which has been discussed above. Clearly, the controller would need to 'resolve' the secret code received, make a comparison with what it stored in memory and decide whether to output data depending on whether there is a match. This is simply a recitation of the steps necessary for claim 9.

Re claim 14 and 15: There is output of diagnostic data in response to codes indicating particular service conditions. The term 'indicating significance of....' is confusing and is not granted patentable weight.

Re claim 16-17: See column 6, lines 15-30: The operator uses the device to query the machine. This data is provided to the CPU of the ATM by various sensors, as can be seen in figure 2. By one definition, obtaining the data associated with a sensor is performing a test. The test can be a single step of reading the sensor output.

Re claim 18: Column 5 (throughout) discusses how the handheld diagnostic devices provide instructions for remedial actions.

Re claims 19-20: See column 3: An interface indicative of the 'state of health' of the ATM is brought up in response to a signal from the ATM. The interface is broadly a browser because it is software that allows a user to browse through manual information one piece at a time.

Re claim 21: The state of health information comes from the ATM (column 3). Thus, it makes sense that once the diagnostic device of Coutts is disconnected from the ATM, this data will no longer be received and thus there is no longer data to display. Viewer software would no longer be needed.

Re claim 23: Note that security features are present: see Coutts (column 3, lines 46-50). These security features will generally limit the output of diagnostic data to the time of data exchange.

Re claim 25: Seen broadly, the handheld diagnostic device of Coutts et al. *is* computer readable media for the ATM is (through the use of a communication protocol) able to read/receive data from it.

Re claim 26: See column 3, lines 30-50 of Coutts: instructions are provided that correspond to service manual data.

Claims 11, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coutts as modified by Gill as applied to claim 1 above, in view of Moodie et al. (US 2003/0009374).

Coutts/Gill shows that access can be controlled in part by the use of a secret code.

Coutts/ Gill does not, however, show access as a function of date.

Moodie et al. teaches (see notably paragraph [0054]) the common arrangement where an access code is a function of date.

In view of Moodie et al.'s teaching, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the a access code a function of date as taught in Moodie et al. because this way, the access code changes regularly, for increased security, because this makes compromising the code much more difficult.

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Coutts as modified by Gill as applied to claim 1 above, in view of Anderson et al. (US 4,186,871).

Coutts/ Gill fails to show encryption in communications between the diagnostic device and the ATM.

Encrypted communications is a notoriously old and well-known communications technique, widely used in any systems that need to be secure, especially in systems involving money. Anderson et al. is one example: see for instance column 3, lines 20-50.

In view of Anderson's teachings, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the old and well-known encryption in the communications of Coutts/ Gill because firstly Coutts suggested that "any other suitable security means" (column 3, lines 30-40 of Coutts) may be used and second, encryption can literally make it mathematically impossible for an attacker to read critical data in transit.

Allowable Subject Matter

Claims 27-34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art fails to teach or fairly suggest an arrangement in accordance with the limitations upon which claim 27 depends, with a computer device distinct from a computer readable media on which a secret code resides, where the computer device is operative to output data corresponding to service manual data based on the secret code.

In Coutts for instance there is just one diagnostic tool distinct from the ATM, not two as claim 27 recites.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel A. Hess whose telephone number is (571) 272-2392. The examiner can normally be reached on 8:00 AM - 5:00 PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Daniel A Hess/
Primary Examiner, Art Unit 2876

4/3/08